

DIVISION OF WILDLIFE RESOURCES

DOUGLAS F. DAY Director

EQUAL OPPORTUNITY EMPLOYER

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Reply To

SOUTHEASTERN REGIONAL OFFICE

455 West Railroad Avenue, Box 840, Price, Utah 84501

DIVISION OF QIL, GAS & MINING

(801) 637-3310

June 17, 1980

Mr. Cleon B. Feight, Director Division of Oil, Gas and Mining 1988 West North Temple Salt Lake City, Utah 84116

Attention: Mary Ann Wright

Dear Cleon:

In response to the request for consultation concerning the nature and level of detail for fish and wildlife resource information to be provided for the Grandal Canyon Mine project proposed by General Coal Company, the following recommendations are offered. These recommendations parallel the "Guidelines for Fish and Wildlife Resource Information Required in Utah on Coal Mine Lands" suggested by our Division and provided earlier to Mary Ann Wright.

## Mapping and Associated Narrative

- l. The applicant should provide detailed topographic maps or aerial photographs of the mine plan and designated adjacent areas that display vegetation cover. Unique habitat types such as wetlands, bogs, seeps, flood plains and riparian zones are of special importance to wildlife. The maps should be accompanied by sufficient descriptive narration describing the various plant communities as follows:
  - Total acreage for each vegetation community
  - b. Species composition of vegetation communities
  - Condition, successional stage and trend of all vegetation communities C.
  - Present use by livestock

It is probable that this information would have to be secured through a land management agency or a qualified, private consultant.

The applicant should provide detailed topographic maps of the mine plan and designated adjacent areas that display distributions and use areas for high interest species of terrestrial and aquatic vertebrate wildlife. Such

Warren T. Harward

maps should be of the same scale as the vegetation cover maps. The maps should be accompanied by sufficient descriptive narration describing the high interest Aquatic, Amphibian, Reptilian, Avian and Mammalian forms of wildlife and the quality (ranking) and quantity (extent or acreage) of their use areas.

This information is available from Utah's Division of Wildlife Resources Southeastern Regional office in Price, Utah.

3. The applicant should provide detailed topographic maps of the mine plan and designated adjacent areas that display locations of all seeps; springs; wells; perennial, intermittent and ephemeral streams; lakes; reservoirs and ponds. Such maps should be accompanied by sufficient descriptive narration and tabular data concerning quantity and quality of the various surface waters (e.g., miles of stream as classified by the state water plan to include stream velocity, gradient, width, depth, pool-riffle ratio, substrata type, acres of flat water and surface water information required for SMC, Part 779.16). Water sources and unique habitats are critical to the survival of many forms of wildlife.

It is probable that this information would have to be secured through a land management agency, State Department of Health (Bureau of Water Quality) or a qualified, private consultant.

## Fish or Wildlife Studies

## A. Aquatic Wildlife

- 1. Macophytes no studies are recommended since impacts to high interest fishes can be avoided through proper design of the bridge over Huntington Creek and actions that would eliminate blow coal from leaving haul-trucks.
- 2. Macroinvertebrates no studies are recommended since impacts to high interest fishes can be avoided through proper design of the bridge over Huntington Creek and actions that would eliminate blow coal from leaving haul-trucks. However, if the applicants plans change or impact avoidance proceedures not accepted the salmonid fishery in Huntington Creek could then be impacted. Planned impacts on the fishery would necessitate need for the results from high levels of study relative to macroinvertebrates to be included with the mine permit application.

Sampling of macroinvertebrate populations should be conducted each year in early spring before runoff and again in late fall. Supportive data relative to coal sediments through core samples of the stream's substrata should also be collected along with recordation of basic water chemistry measurements. Water chemistry measurements should consider temperature, Ph, conductivity, alkalinity (total and bicarbonate), sulfate, chloride, sodium, potassium, magnesium,

calcium, nitrogen (nitrate), orthophosphate, turbidity, hardness, oil and grease, total disolved solids, bacteria (total and fecal) and heavy metals (copper, lead, zinc and cadnium). Such studies should continue over a period of years until it is demonstrated that the impacts from coal sediments to the macroinvertebrates population in the impacted areas as compared to the control have been corrected. If during a reasonable period of time the impacts cannot be corrected, then mining activity should be suspended.

Studies relative to macrophytes (if desired) or macroinvertebrates must be conducted by a qualified, private consultant.

If needed, studies of macroinvertebrates are recommended in Huntington Creek. The macroinvertebrates serve as the forage base for the salmonid fishery and may be impacted from accumulations of sediments in the creek due to bridge construction and blow coal leaving haul-trucks. The area to be studied should extend from the bridge crossing downstream for at least two kilometers. Additionally, an appropriate upstream control area in Huntington Creek should be studied.

3. Fish - all fish in the state of Utah are protected; therefore, data from low levels of study for fishes inhabiting the mine plan and adjacent areas (Huntington Creek) are recommended to be included in the application for this mine project. Low level studies should identify potential occurrence, relative abundance, status, population trend and preferred habitat use areas for all fishes inhabiting the mine plan and adjacent areas.

Low levels of study concerning fishes have already been completed and are available from Utah's Division of Wildlife Resources Southeastern Regional office in Price, Utah. Data for high levels of study, if needed, are not generally available and would necessitate the services of a private consultant and/or contracting Utah's Division of Wildlife Resources since special permits would be required.

Since this section of Huntington Creek is managed on a "put and take" basis as a catchable fishery, a study of impacts on high interest fishes is impracticable and not recommended.

## B. Terrestrial Wildlife

- 1. Amphibians all amphibians in the state of Utah are protected; therefore, data from low levels of study for amphibians inhabiting the mine plan and adjacent areas are recommended to be included with the application for this mine project. Currently, the tiger salamander is the only species of amphibian recognized as being of high interest to the state of Utah that inhabits the project area. It is not believed that the project will significantly impact this species or its high value habitat use areas, thus, high level studies need not be considered.
- 2. Reptiles all reptiles in the state of Utah are protected; therefore, data from low levels of study for reptiles inhabiting the mine plan and adjacent areas are recommended to be included with the application for this mine

project. Currently, the Utah milk snake and Utah mountain kingsnake are the only species of reptiles recognized as being of high interest to the state of Utah that inhabit the project area. It is not believed that the project will significantly impact these species or their high value habitat use areas, thus, high level studies need not be considered.

Low level studies should identify potential occurrence, relative abundance, status, population trend and preferred habitat use areas for all amphibians and reptiles inhabiting the mine plan and designated adjacent areas. Such studies concerning amphibians and reptiles have already been completed and are available from Utah's Division of Wildlife Resources Southeastern Regional office in Price, Utah.

3. Birds - all birds in the state of Utah are protected; therefore, data from low levels of study for avifauna inhabiting the mine plan and adjacent areas are recommended to be included with the application for this mine project. Low level studies should identify potential occurrence, season of use, relative abundance, status, population trend and preferred habitat use areas for all birds inhabiting the mine plan and designated adjacent areas. These studies have already been completed and are available from Utah's Division of Wildlife Resources Southeastern Regional office in Price, Utah.

An intensive survey to be provided by the applicant for breeding raptors is recommended due to the bird's sensitivity to man's disturbances and a lack of significant site specific knowledge of aeries and breeding territories on the mine project area. Such a survey would represent a high level of study and only needs to be conducted within a one-kilometer radius of planned surface developments and activity centers. The results of such a study should be included with the application for a mining permit. This information is not generally available and would necessitate the services of a qualified, private consultant and/or contracting Utah's Division of Wildlife Resources or the U.S. Fish and Wildlife Service.

High level studies relative to use of the mine plan and designated adjacent areas by migratory and upland game birds, federally listed endangered species of avifauna and migratory birds having high federal interest in the Uintah-Southwestern Utah coal leasing region should be included with the application for a mining permit. Such studies are ongoing or have been completed and are available from Utah's Division of Wildlife Resources Southeastern Regional office in Price, Utah.

No other high level studies are recommended for avifauna since unique habitats have not been identified as having potential to be impacted by the mine project. If the applicant's plans change, high levels of study would be recommended concerning high interest species and their use of unique habitats. Results of such studies should be included with the permit application. This data is not generally available and would necessitate the services of a qualified, private consultant.

4. Mammals - it is recommended that data from low levels of study for mammals inhabiting the mine plan and adjacent areas be included with the application for this mine project. Low level studies should identify potential habitat use areas for all mammals inhabiting the mine plan and designated adjacent areas. These studies have already been completed and are available from Utah's Division of Wildlife Resources Southeastern Regional office in Price, Utah.

Additionally, high level studies relative to use of the mine plan and designated adjacent areas by protected species and federally listed endangered species of mammals should be included with the application for a mining permit. Such studies are ongoing or have been completed and are available from Utah's Division of Wildlife Resources Southeastern Regional office in Price, Utah.

No other high level studies are recommended for mammals since high interest species of limited distribution will not be severely impacted by the mining project.

5. Consultation Required for the Presence of Threatened or Endangered Species - it is recommended that the applicant and the Division of Oil, Gas and Mining contact the U.S. Fish and Wildlife Service for consultation required to determine the presence or non-presence of threatened or endangered biotic species on the project area.

Thank you for an opportunity to provide input into this area of concern.

Sincerely,

. Wilson, Supervisor

Southeastern Region

LTW:LBD:cs

cc: Darrell Nish

Clark Johnson

Sam Rowley Ira Hatch